Amendments to the Specification

Please replace the paragraph beginning at page 3, line 22, with the following redlined paragraph:

Figure 6 shows nuclear translocation of NF-κB in THP-1 cells (monocyte cell line) untreated (from left, first panel, images; second panel, quantitation of first panel images) and treated with LPS (third panel, images; fourth panel, quantitation of third panel images). Images are from darkfield, NF-κB labeled, brightfield, and 7-AAD nuclear ~~label~~ labeled.

Please replace the paragraph beginning at page 4, line 6, with the following redlined paragraph:

Figure 11 shows images of nuclear translocation of NF-κB in adherent A-549 cells untreated (from left, first panel, images; second panel, quantitation of first panel images) and treated with IL-1β/TNF-α (third panel, images; fourth panel, quantitation of third panel images). Images are from darkfield, NF-κB labeled, brightfield, and 7-AAD nuclear ~~label~~ labeled.

Change(s) applied to document, /J.L.W./ 12/28/2011

Please replace the paragraph beginning at page ~~14, line 16~~ 12 line 27, with the following redlined paragraph:

By way of background and wishing to be bound by theory, NF-κB resides predominantly in the cytoplasm in resting cells. Activating treatments (*e.g.*, IL-1 β /TNF-α or LPS) induce NF-κB translocation into the nucleus in responsive cell types. Thus, the ratio of nuclear to cytoplasmic ~~NFkB~~ NF-κB increases with LPS treatment. Similar to the A-549 cells, NF-κB is translocated from the cytoplasm to the nucleus when the non-adherent human monocyte cell line, THP-1, is exposed to lipopolysaccharide (LPS). Using the identical probing protocol and CCF, again a quantifiable difference in the nuclear localization NF-κB is demonstrated when comparing untreated and LPS-

treated cells (*see* Figures 6 and 9). A nuclear and NF-κB pixel signal correlation analysis CCF was used to quantitate the difference between untranslocated NF-κB and NF-κB translocated to the cell nucleus. The CCF distinguished location-specific (nuclear and cytoplasmic) quantitation of NF-κB to distinguish LPS-treated from untreated THP-1 cells. Thus, the methods of the present disclosure may also be used with non-adherent cells and cell lines.

Change(s) applied to document, /J.L.W./ 12/28/2011

Please replace the section beginning at ~~page 17, line 1~~ 15 line 3, with the following redlined section:

A. Materials

01. anti-NFκB (F6) : Santa Cruz Biotechnology (Cat. No.SC-8008), 200 μg/ml

02. Alexa Fluor488 donkey anti-mouse IgG: Molecular Probes ~~(Cat.),~~ 1.1 mg/ml

03. Streptavidin Alexa Fluor 488: Molecular Probes

04. Recombinant human TNF-α : BD (Cat# 554618, Lot# 0000056653)

05. Recombinant human IL-1□: ~~ebi0science~~ eBioscience (Cat# 14-8018-62~~, Lot#~~)

06. A549 cells (ATCC No. CCL-185)

07. Dulbecco's MEM

08. Fetal Calf Serum

09. F-25 Culture Flask

10. 0.25 % trypsin / EDTA

11. Phosphate buffered saline without Ca^{2+}/Mg^{2+} (PBS)

12. 4% PFA/PBS (Fixation Buffer)

13. 0.1% triton X-100/PBS (Perm Buffer)